

Ysgol Y Deri Expansion

SAB Works: Control of Water Run-Off

Introduction

The construction works will generally follow the guidance set out in the **CEMP Appendix 5** to control the risk of surface water run-off during the construction phase.

This phasing plan will show how the site team will control the risk of surface water run off during each specific phase of the works.

General principles to follow

The following items will be undertaken to help control surface water run-off:

- Install control measures as noted in **Appendix 5** of the CEMP, these consist of:
 - Silt traps / fencing
 - Sediment entrapment mats
 - Gully guards
 - Temporary catchment pits
 - Temporary drainage run-off channels
- Monitor weather reports
- Follow recommendations from statutory bodies

Sequence and Programme of the works

The following summary is generally how the works will be programmed whereby the control measures identified on this page will form part of the works:

Site Set Up (Starts February 2023)

- Remove existing hedgerow
- Construct new access off Fort Road, and start widening works
- Top soil strip to entrance road and into car park

New Build Works (Summer 2023 – Summer 2024)

- Top soil strip to new build area
- Top soil strip to car park & bus drop off
- Top soil strip to new MUGA and artificial pitch area
- Cut and fill to grounds including importing stone
- Car park to formation level for welfare set up
- Final surface finish to external play areas and MUGA
- Surface finish to bus drop off

Drainage SAB Related Works (2023)

- Installation of flow controls
- Construction of new attenuation tanks
- Construction of rain garden and Swale
- Installation of porous asphalt & resin bound gravel
- Formation of MUGA and artificial pitch sub-base

Decant & Completion (Summer 2024)

- Removal of main welfare cabins
- Complete porous asphalt and permeable paving to car park
- Works complete

3	23/01/22	Updated drawings and programme dates
2	10/10/22	Updated drawings and programme dates
1	30/08/22	Updated drawings and programme dates
-	08/04/22	First Issue
Rev	Date	Reason for Issue

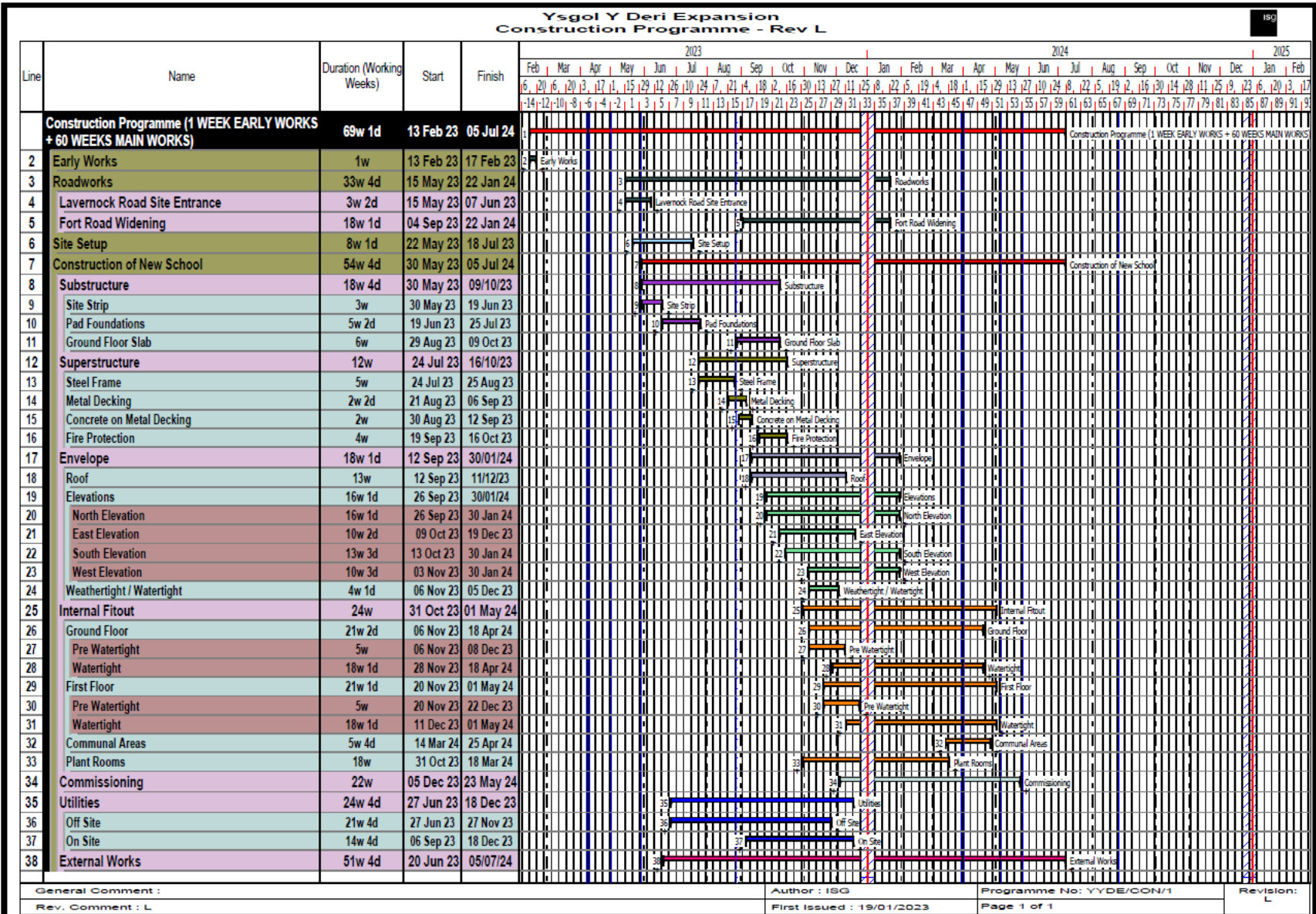


Date 08/04/22

Number	Revision
YYDE/DrainSAB	3

Ysgol Y Deri Expansion

SAB Works: Construction Programme



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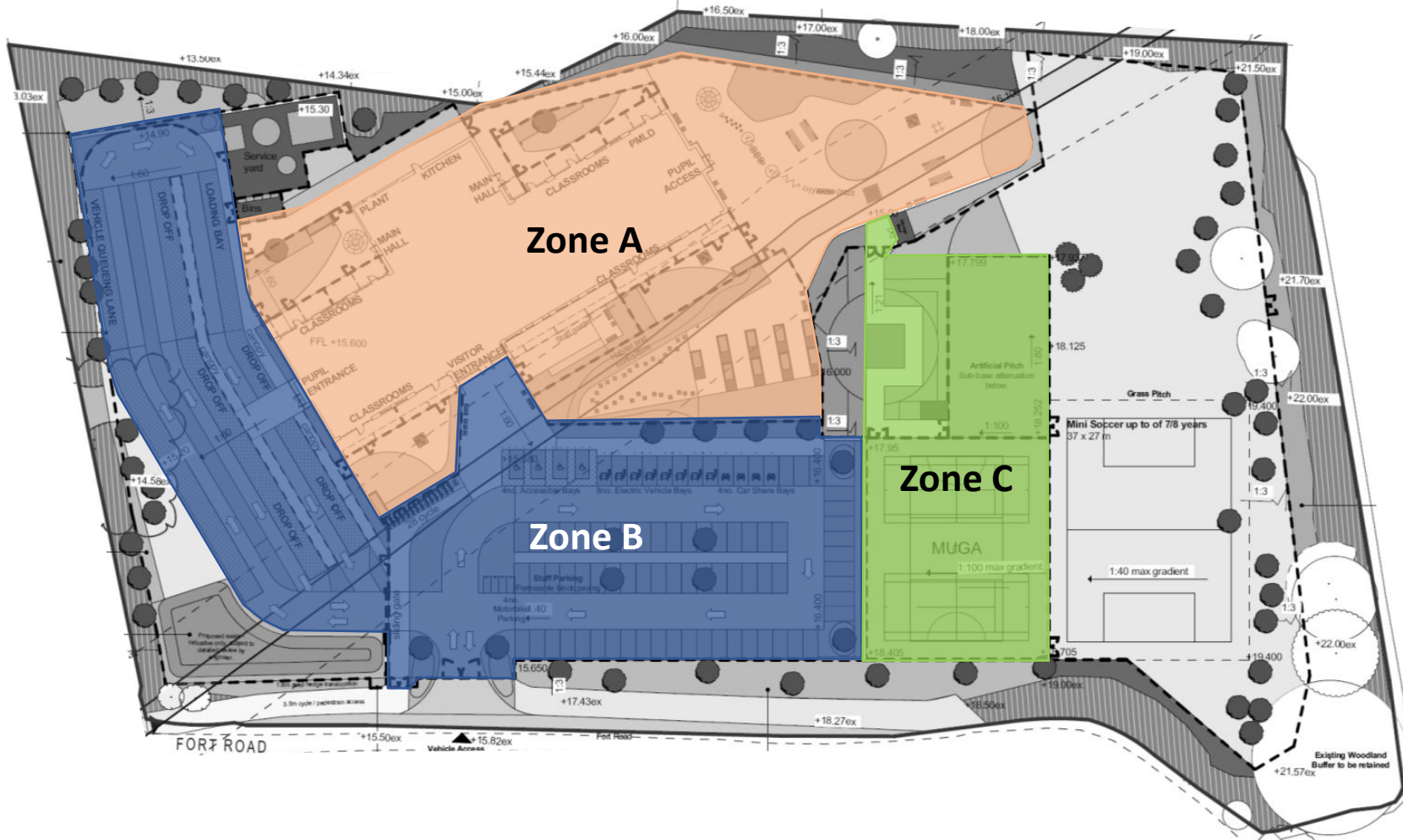
Number	Revision
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General Comment :
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Author : ISG
First Issued : 19/01/2023
Programme No: YYDE/CON/1
Page 1 of 1
Revision: L

Ysgol Y Deri Expansion

SAB Works: Overview of Drainage Zones



Key:

- Zone A – Main Building and Hard Play / Landscaping
- Zone B – Entrances, Bus Drop Off and Staff Car Park
- Zone C – MUGA and Artificial Pitch

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Ysgol Y Deri Expansion

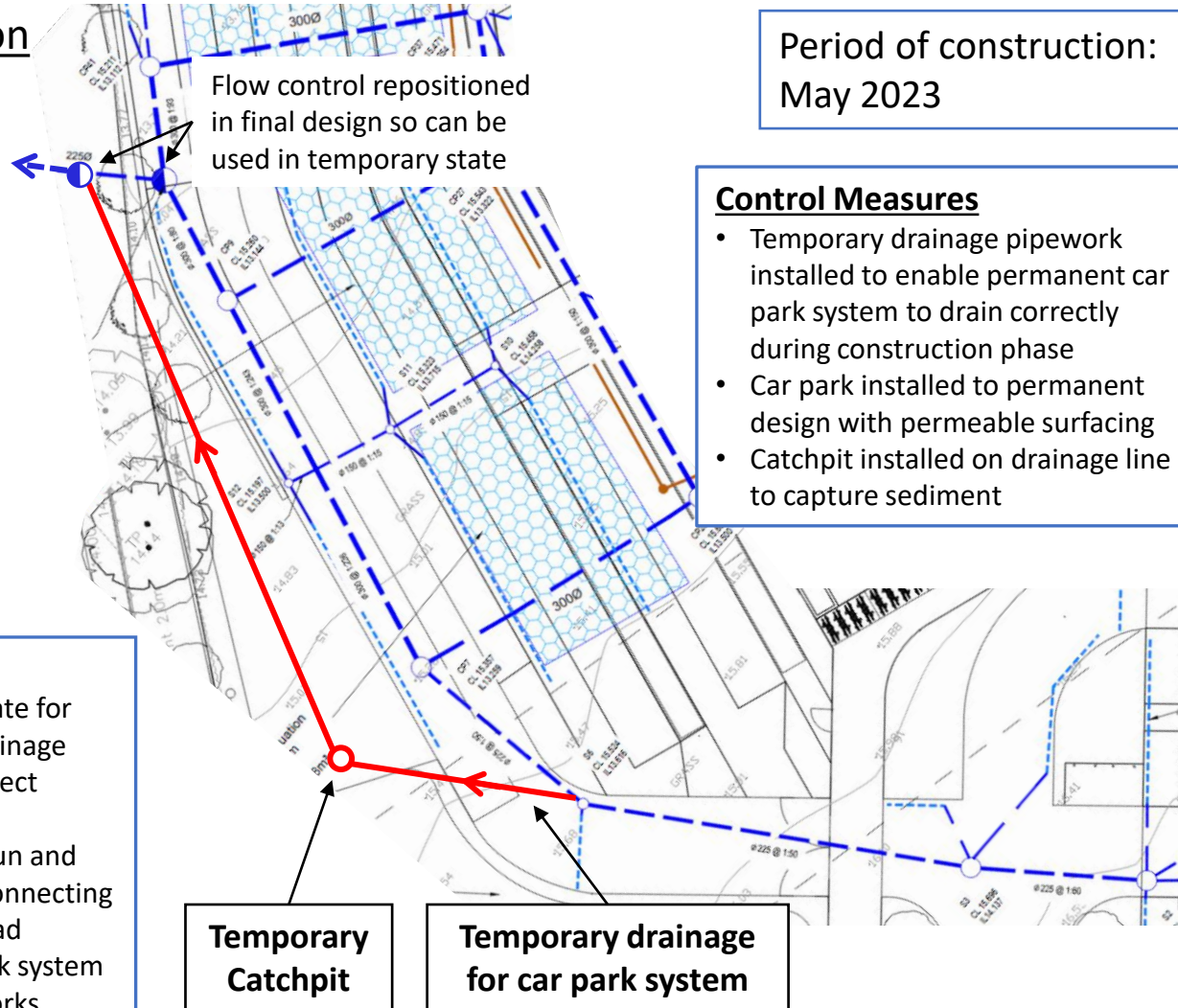
SAB Works: Control of Water Run Off

Location Plan:



Final Outfall Connection

Discharge
to Sully
Brook



Period of construction:
May 2023

Control Measures

- Temporary drainage pipework installed to enable permanent car park system to drain correctly during construction phase
- Car park installed to permanent design with permeable surfacing
- Catchpit installed on drainage line to capture sediment

Installation sequence

- Clear overgrowth and excavate for connection into highway drainage
- Install flow control and connect pipework into road gully
- Install temporary drainage run and catchpit towards car park, connecting to S6 manhole in bus bay road
- Use drainage line for car park system during main construction works

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Number	YYDE/DrainSAB	Revision
		3

Ysgol Y Deri Expansion

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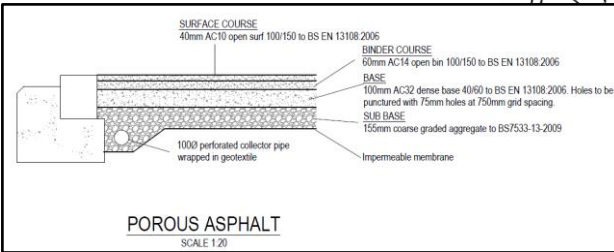


Temporary Contractors Car Park

Road ways installed to finished surface

Drainage channel during formation

Period of construction:
May – June 2023 &
June – July 2024



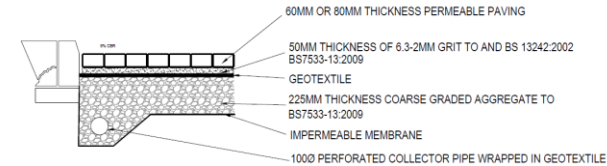
System connected into temporary drainage to outfall

Silt fencing to perimeter

Parking bays installed to finished level

Installation sequence

- Install run-off control measures
- Excavate and remove top soil layer to formation level
- Import stone and install works as per the design
- Installation of manhole chambers and connection into temporary storm drainage connected to outfall
- Lay coarse-graded aggregate as specified
- Install permeable paving and surface course tarmac
- Use finished area for contractor parking



Control Measures

- Use silt fencing to ensure any run off is controlled
- Utilisation of permanent drainage system

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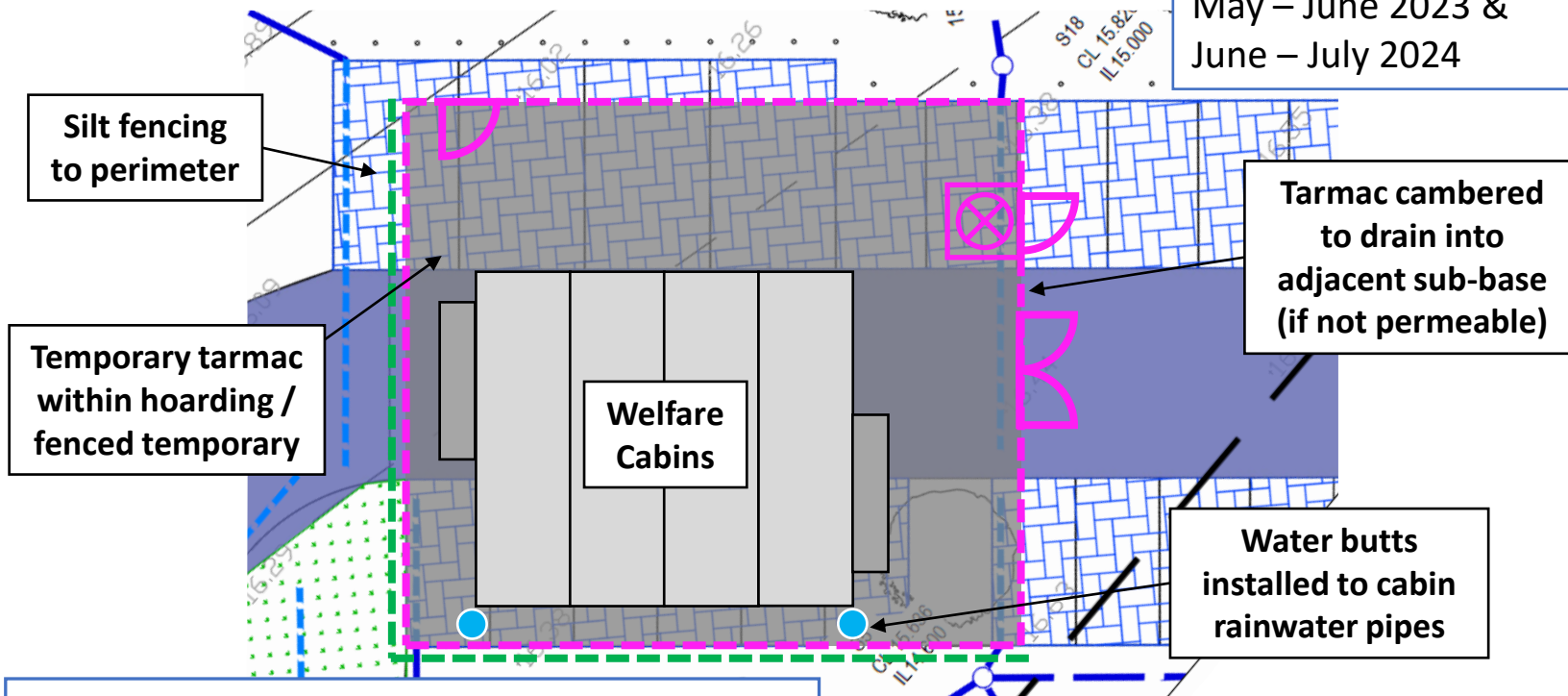
SAB Works: Control of Water Run Off

Location Plan:



Temporary Site Welfare Set Up

Period of construction:
May – June 2023 &
June – July 2024



Installation sequence

- Install run-off control measures as part of completing adjacent car park construction
- Excavate and cast foundations for cabins, as per temporary works design
- Installation of cabins and sacrificial tarmac to welfare area
- Once project complete; cabins to be removed, foundations broken out and sub-base / finishes to car park completed as per permanent design

Control Measures

- Use silt fencing to ensure any run off into incomplete areas is sufficiently free of sediment
- Utilise permeable tarmac, or cambered construction, so run-off from welfare enters permanent sub-base construction and car park drainage system
- Water butts installed to capture rainwater which can be reused on site (ie: tool water suppression)

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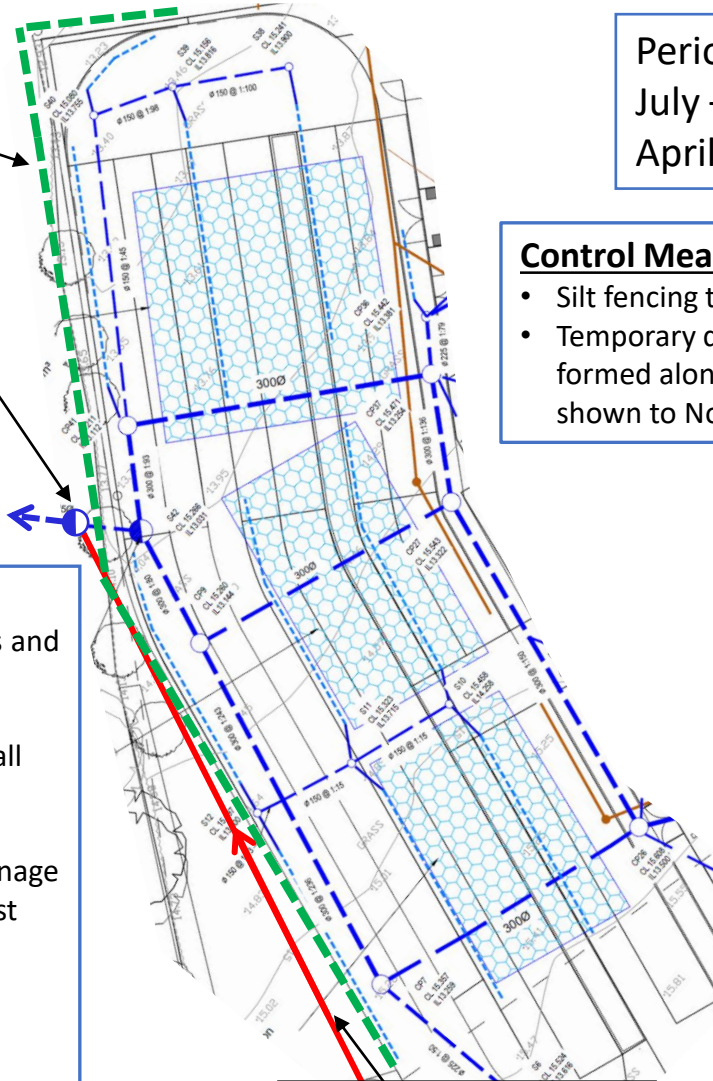


Bus Drop Off Area

Silt fencing

Flow control repositioned in final design so can be used in temporary state

Discharge to Sully Brook



Period of construction:
July – October 2023 &
April – May 2024

Control Measures

- Silt fencing to lower perimeter of area
- Temporary drainage channels to be formed along line of silt fencing shown to North corner (if required)

Installation sequence

- Complete 'Final Outfall Connection' works and temporary drainage to car park
- Install run-off control measures
- Strip top soil and excavate for retaining wall foundation
- Construction retaining wall
- Install attenuation tanks + perforated drainage and associated manholes & drainage whilst importing stone to level as required
- Install flow control chamber
- Install 100mm AC32 base course with punctured holes
- Install surface finishes (permeable tarmac to drop off)

Temporary drainage
for car park system

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SAB Works: Control of Water Run Off

Location Plan:



MUGA & Artificial Pitch Construction

Period of construction:
Sept – Nov 2023 &
Apr – May 2024

Temporary drainage channels feeding into temporary Swale

Flow control chamber

Silt fencing along base of retaining wall

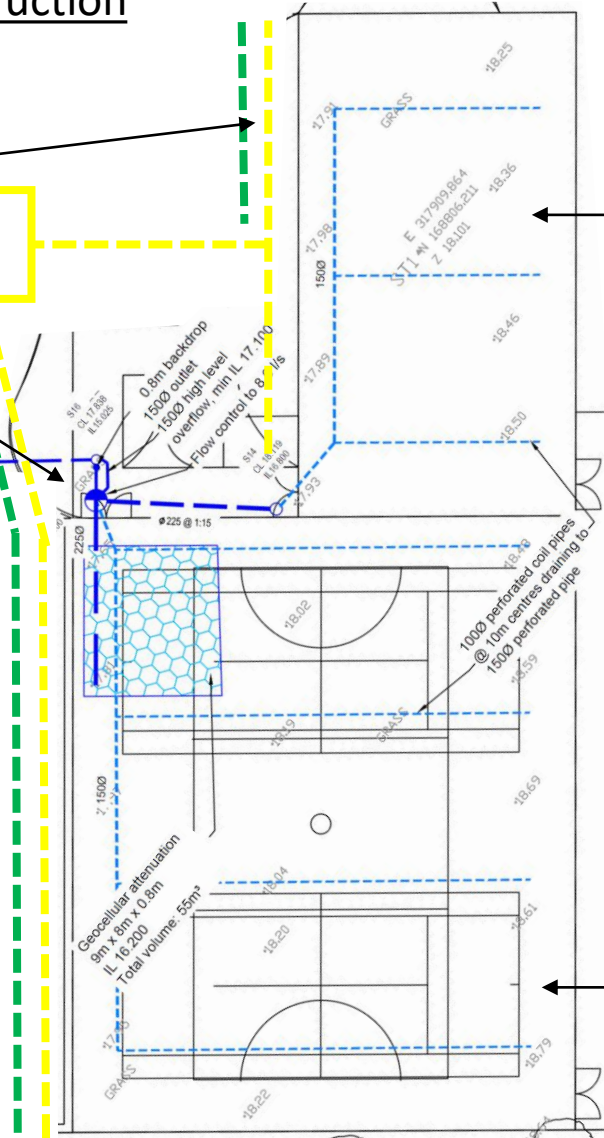
Artificial Pitch

Control Measures

- Silt fencing to downhill side of drainage channels and along base of retaining wall
- Temporary drainage channels to perimeter of working areas
- Temporary Swale lined with sediment entrapment mats
- Final outfall and attenuation tanks all installed prior to laying of surface finishes

Installation sequence

- Install run-off control measures
- Strip top soil and excavate for retaining wall foundation
- Construction retaining wall and install attenuation tank / perforated drainage pipework
- Install flow control chamber and connect to rest of network
- Import stone to formation level
- Install surface finishes (permeable tarmac to MUGA and specialist surface to artificial pitch)



MUGA

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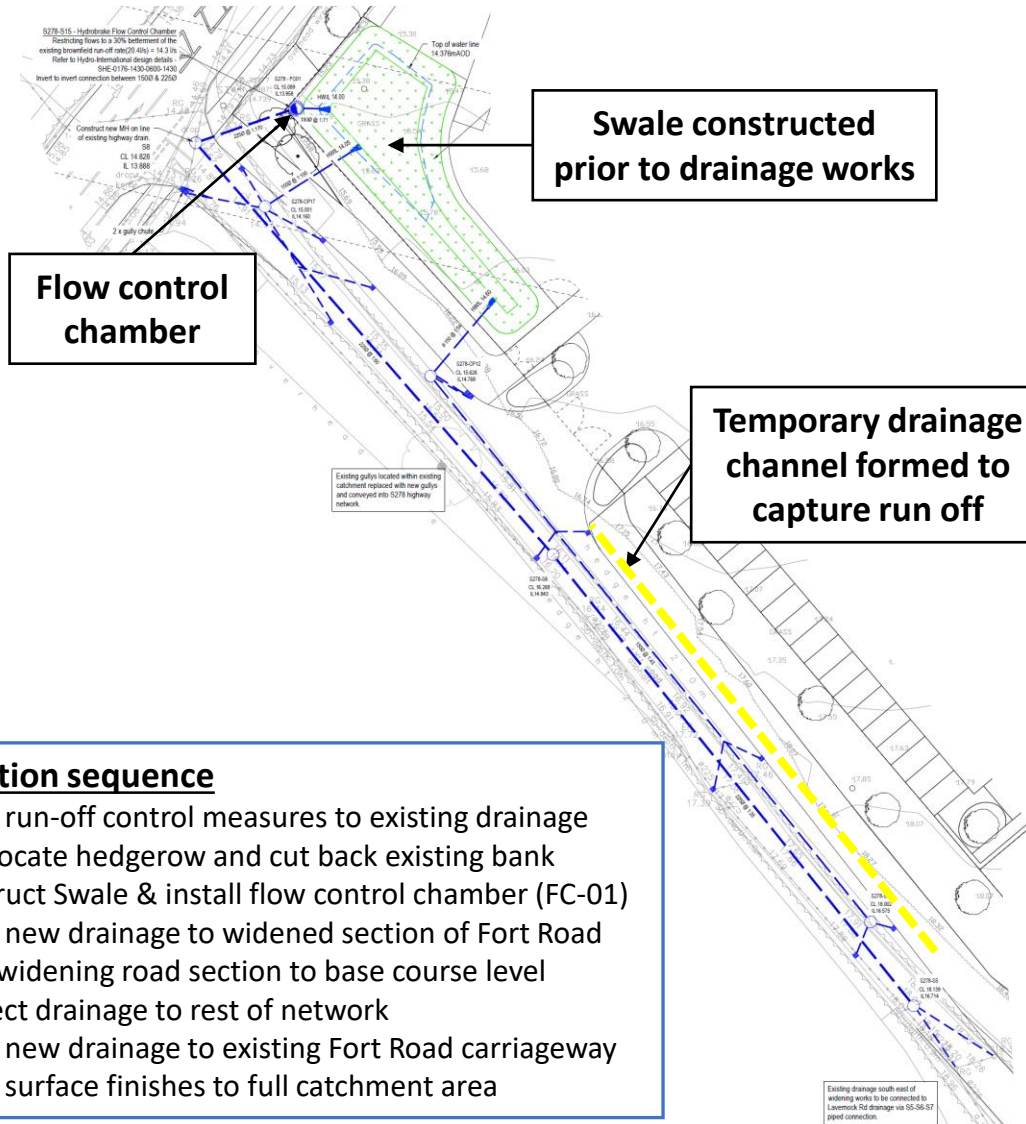


S278 Works to Fort Road

Period of construction:
Oct 2023 – Jan 2024

Control Measures

- Gulley guards installed to existing road gullies during works
- Temporary drainage channels to side of working area
- Swale lined with sediment entrapment mats
- Final outfall connected prior to laying of surface finishes



Installation sequence

- Install run-off control measures to existing drainage
- Translocate hedgerow and cut back existing bank
- Construct Swale & install flow control chamber (FC-01)
- Install new drainage to widened section of Fort Road
- Form widening road section to base course level
- Connect drainage to rest of network
- Install new drainage to existing Fort Road carriageway
- Install surface finishes to full catchment area

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